

April Meeting

**Friday, April 16
7:00 pm**

Auction

**Our Savior's Lutheran Church
1035 Carol Lane
Lafayette, CA**

The club will hold its annual auction April 16. Ham gear and related equipment are welcome. Doors open at 6:00 p.m., auction begins 7:00 p.m. and ends promptly at 10 o'clock. The location will be 1035 Carol Lane, Lafayette.

Presidential QRM

By Trevor Hall, WA6JAU

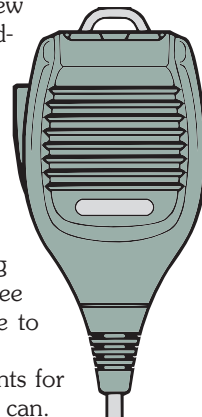
The auction is here again. Come one, come all for the opportunity to purchase those hard to find items. The auction will start promptly at 7:00 p.m. on Friday, April 16, at Our Savior's Lutheran Church, 1035 Carol Lane in Lafayette.

In the month of March we had a very informative presentation by the ARRL Pacific Division director Bob Vallio, W6RGG. Bob talked about the new license structure in fine detail. Then Bob reviewed the hazards of Broad-band Over Power-line. BPL is still being tested across the country and gaining popularity.

Our May speaker, Robert Hampton, KF6FGH, will give us a talk on MARS operation. Bob received high compliments from the Martinez club with his presentation, and I am looking forward to it.

Thanks to the efforts of Tim Barrett, K6BIV, we now have both IRLP and EchoLink on the 440 repeater. You can only use one system at a time, but they are both available. Tim was also instrumental in getting our new DSL connection installed and working. The technical committee has been working hard at upgrading our repeater system and is close to having our new 440 antennas installed for improved service.

Service events are in high gear. I will be participating in service events for the next three weekends. Contact Pete Harris, KE6ZIW, and help if you can.



Two Days, Two Events, Two Strategies for Radio Communication

By Pete Harris, KE6ZIW

(This article first appeared in the Carrier, October, 1999)

On Saturday and Sunday, September 11th and 12th, members of the Mt. Diablo Amateur Radio Club provided radio communication for two dramatically different public service events. One took place in a wooded and hilly regional wilderness area, the other on the streets of Walnut Creek. One involved supporting and tracking the progress of horseback riders over 50 miles of rough terrain, the other involved support activities for a 10K run over approximately 6 miles of mostly paved surfaces. One included ham radio operators moving in 4 wheel drive vehicles, while in the other event ham operators were mostly stationed at prescribed checkpoints along the course. These two events posed very different challenges for radio communications, and required different strategies for dealing with these challenges.

The Saturday event, the annual Las Trampas Endurance Trail Ride, coordinated by Joe Gregory, WA6DQN, was a fifty mile horse ride competition that took place in Redwood and Chabot Regional Parks. The terrain was rugged, with lots of peaks, valleys, and tall trees, and significant distances separating radio team members. There were approximately 80 riders. Though 6 hams were scheduled to work the event, only 4 actually did, requiring more moving around by the hams.

The Sunday event, the 55th Walnut Festival 5K/10K Run, coordinated by Dick Brown, KT6X, took place within the city of Walnut Creek, and covered a much smaller area than the Trail Ride. The terrain was generally flat, except for the John Muir Hospital grade, which separated two of the checkpoints from the others. There were several hundred runners taking part. Ten hams were stationed at various checkpoints, or in SAG Wagons, or shadowing the Race Director.

The first issue for a radio communication team using the 2-meter band is usually whether the team will use a repeater or will use a simplex frequency for direct station-to-station communication.

For the Trail Ride Joe Gregory decided that a simplex frequency would be used. The

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Mt. Diablo Amateur Radio Club W6CX

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The *Carrier* is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and space is available.

All material must be submitted to the editor by the first day of the month of publication. Material is accepted on a first-in, first-out basis. Articles and other material may be submitted via Internet email to carrier@gardnerclan.net or delivered to the editor at the address listed in the club roster. Material will be accepted in plain ASCII or rich text format (RTF). Material may also be submitted as hardcopy.

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General Meeting Minutes

March 19, 2004

The meeting was called to order by president Trevor Hall, WA6JAU, at 7:30 p.m. The minutes of the February 20, 2004 meeting were approved.

PACIFICON: John Schulze, KR6CR, said that the swap meeting will be held on Sunday to relieve the parking on Saturday.

Auction: John announced that the auction will be held April 16th from 7 p.m. to 10 p.m. The doors open at 6 p.m. He outlined the rules: 1) ham related items only but some computer equipment will be allowed, 2) 10% commission, 3) \$1 buy back, 4) auctioneer's decisions are final, 5) payment by check or cash, no credit cards, 6) seller is responsible for removal of unsold equipment, 5) no "boat anchors".

Treasurer: Harold Johnsen, AE6FC, said the balance on hand is \$44,397 plus approximately \$3,000 in the PACIFICON account.

Trailer: Trevor said the City of Martinez wants us to take back the ownership of the trailer and asked for any ideas or assistance in obtaining insurance.

Public Service: Pete Harris, KE6ZIW, said volunteers are needed for upcoming events, April 18th, two events, a bicycle event and a walk; April 24th, two events, a walkathon and bicycle; May 1st, trail ride; May 2nd, foot race; June 19th, trail ride.

VE Exams: Dick Brown, KT6X, said that in tonight's testing two passed the code test and one passed technician.

Technical: Trevor thanked Tim Barrett, K6BIV, for arranging the installation of our DSL line that is being hosted by Tim Kirkpatrick, K6TPK, at his home. Tim Barrett said that in the course of the process, he is acquiring an iPod as part of a sales promotion. He suggested that it be sold by raffle. He also proposed that we acquire a Linux box, costing about \$150, so that we will have both EchoLink and IRLP capabilities.

Keith Lattin, N6PMF, said the tower climbers are all set to go on the 440 MHz antenna repair.

Emergency Communications: Dana Jones, K6BRR, said there will be a training session on March 27th at the county fairgrounds. The topic is net control.

Speaker: Bob Vallio, W6RGG, Pacific Division Director, was our guest speaker. He encouraged anyone with suggestions or comments on ARRL matters to feel free to contact him at w6rgg@arrl.org, or to call him. His telephone number is listed in QST.

Bob covered the latest licensing proposals by the ARRL to the FCC. The FCC would like to simplify the licensing structure but does not want to pay for extensive database revisions. Consistent with that, the ARRL has proposed three licenses, 1) a novice class with no code requirement, 2) a general class also with no code that would absorb the current tech and tech plus classes, and 3) an extra class with five wpm code that would absorb the current advanced class.

Bob also spent a few minutes describing the horrors of Broadband over Power Lines, should it be implemented.

Adjourned: The meeting was adjourned at 9:20 p.m.

Dick Schulze, AA6DL, Secretary

Board Meeting Minutes

March 1, 2004

The meeting of the board of directors of MDARC, held on March 1, 2004, at Bakers Square Restaurant in Concord, was called to order by president Trevor Hall, WA6JAU, at 7:30 p.m. The minutes of the February 2, 2004 meeting were approved as modified to show Dana Jones would prepare a calendar of RACES events.

Board Members Present: Bob Beard, KG6FPZ, Dick Brown, KT6X, Jay Caldis, KT6Y, Trevor Hall, WA6JAU, Harold Johnsen, AE6FC, Dana Jones, K6BRR, Terry Matzkin, KE6WRE, and Dick Schulze, AA6DL.

Other Members and Guests: Keith Lattin, N6PMF, George Roush, WB6OFH, and Pete Slagle, K6XL.

Auction: Terry raised the issue discussed at the February meeting regard-

ing CRT's and other equipment that may be difficult to dispose of. The board again felt this should be left to the auction chair to control.

Technical Committee: Keith said the tower climber will be changing the two UHF antennas and he expects to have some contribution from the other antenna users. EchoLink is down but Howard is working on it. Keith said we will have Wi-Fi capabilities but after the voting receiver project is finished. Keith will get estimates for the damages to the trailer antenna mast, rotor and beam. Trevor will try to obtain an insurance certificate for the trailer.

Door Prizes: Trevor questioned the same door prize of a 2M handheld at every meeting. Several suggestions were made, scanner, computer peripherals, 440 or 220 handheld.

Membership: Pete will prepare membership cards for mailing with the April Carrier. The cards will have repeater codes printed on the back side.

Membership Directory: On motion of Dick Brown the board voted to include any silent key who was ever a member of the club. The vote was six to three.

Treasurer: Harold stated that the PACIFICON income might be unrelated business income and thus taxable. He will do further research.

Adjourned: The meeting adjourned at 8:40 p.m.

Dick Schulze, AA6DL, Secretary

Two Days, Two Events, Two Strategies for Radio Communication

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reasons included that hams were either stationed at horse P&R stops (pulse and respiration checks) some of which were located in geographic "holes" from which they could not hit the club repeater, or they were on the move in vehicles and going in and out of repeater contact. Use of simplex, although also very difficult at times, actually provided more consistent communication. With simplex, there was usually at least one team member who was in a position to relay messages between two others who were trying to communicate but couldn't do so directly. Use of a repeater would have made relaying of messages much more difficult because radios would generally be tuned to the repeater output frequency, not the operators' output frequency.

For the 5K/10K Run, it was tempting to use a simplex frequency, since the distance separating all the hams was relatively small (about 3 miles). Advantages of simplex include less disruptions by others using the frequency, leaving the repeater free for others, and less chance for jamming. However it was decided by Dick Brown that the team would use the club repeater (with a backup simplex frequency if needed). The primary reason was that one or two of the checkpoints were on the other side of the John Muir Hospital grade from the net-control operator and could not be reached by simplex. All could reach the club repeater due to its high elevation.

The methods of communication for the two events were quite different. The Trail Ride was operated as an "open net"—that is, there was no person in the official role of net-control, acting as a central hub for input and output of communications. Rather, stations called each other directly as needed. This was more feasible because of the relatively small number of hams and radio transmissions. Relaying of messages became a major way of communicating. There was a kind of de facto net-control, with whoever could hear others assuming at least tempo-

rary responsibility for input and output of information. Under the circumstances, having one defined net-control would have been useless because there was no one position from which all other hams could be consistently heard.

The 5K/10K Run, however, was run under a "net-control" system, in which most of the messages came in to the net-control ham and were passed back out from net-control to the appropriate person(s). The large number of hams on the team and high number of radio transmissions would have made station-to-station communication chaotic. Another factor was that the event organizers were located in the same area where the net-control was and most of the information flowed in and out from those persons.

At times, however, net-control Dick Brown directed various stations to communicate directly with each other as needed for specific purposes.

A third difference between the two events was the kind of equipment needed. The Trail Ride relied mostly on the use of full-powered mobile (car) radios and antennas. One ham, who moved around in the Ride Director's truck, used a handheld, but with a mag-mount antenna on the roof (a cigarette lighter power adaptor or higher capacity utility battery is useful in such a case to get maximum transmitting power and sustain it throughout the event). Hand-helds used solo, even with enhanced rubber duck antennas, were not reliable means of communication. However, there was use of mobile radios with crossband repeat capability in conjunction with hand-held radios. Crossbanding allowed a ham to be away from the car with a hand-held and use their (or another's) car radio as a local repeater to boost incoming and outgoing signals. Crossbanding also allowed use of low power transmitting on hand-helds to extend battery life for this long event.

The 5K/10K Run relied mostly on hand held radios with rubber ducks. Hams had to be away from their cars and able to move around on foot. The repeater could be reached easily with low power. There was lots of transmitting but the event was fairly short.

One of the thrilling aspects of participating in public service events as part of an amateur radio team is the challenge of finding communication strategies that best deal with the unique conditions, circumstances and needs of each event. The diversity of conditions found in the field was well demonstrated by the public service events of September 11th and September 12th, 1999.

Note: see list of upcoming 2004 public service events in this issue and call me to sign-up!

Upcoming 2004 Public Service Events By Pete Harris, KE6ZIW

Participating in radio communications for Public Service events is a thrilling experience for many different reasons. Some of these are:

- The magic of radio transmissions
- The camaraderie of being on a radio team
- The chance to do something meaningful for a good cause
- The fun and satisfaction of using your radio equipment and opportunity to learn its various capabilities in real-life situations
- The beautiful places and settings that you get to enjoy

The events listed below are coming up in the near future and *we still have some slots available*. For most events all you need

is a hand-held 2 meter radio and an extra battery. Give me a call or email to sign up (925-228-4503, pharris125@comcast.net).

1. Primavera 100 Mile Bike Ride
4/18/04, Sunol
Radio Coordinator: Bob Green
2. MS Walk
4/18/04, Heather Farms Park, Walnut Creek
Radio Coordinator: Jeff Hart
3. Top Hat Classic Bike Ride
4/24/04, Pleasanton
Radio Coordinator: Dick Brown
4. March of Dimes Walk America
4/24/04, Heather Farms Park, Walnut Creek
Event Coordinator: Terry Matzkin
5. Concord Mt. Diablo Trailride
5/1/04, Mt. Diablo-4WD vehicles welcome
Radio Coordinator: Tom Seabury
6. Devil Mt. Run
5/2/04, Danville
Radio Coordinator: Ed Ritchie
7. Human Race
5/8/04, Heather Farms Park, Walnut Creek
Radio Coordinator: Jeff Hart
8. Escape From Alcatraz
6/?/04, San Francisco Waterfront & Bay
Radio Coordinator: Barry Bettman
9. Oakland Hills Trailride
6/19/04, Redwood & Chabot Regional Parks
Radio Coordinator: Tom Seabury
10. 4th of July Parade
7/4/04, Downtown Pleasant Hill
Radio Coordinator: Pete Harris
11. Alcatraz Challenge
7/?/04, San Francisco Waterfront & Bay
Radio Coordinator: Barry Bettman

MDARC Auction

April 16, 2004

The club will hold its annual auction April 16. Ham gear and related equipment are welcome. Doors open at 6:00 p.m., auction begins 7:00 p.m., and ends promptly at 10 o'clock. The location will be 1035 Carol Lane, Lafayette.

This is a great opportunity to clean out the "shack" or to search for bargains. These events are always a lot of fun. I hope to see you there.

John Schulze, KR6CR, Auction Chair

Auction Rules

1. Ham radio related equipment only.
2. 10% commission charged to seller
3. \$1.00 charge for buy backs
4. The auctioneer has the final word
5. Cash and checks only, no credit cards accepted
6. The seller is responsible for any unsold items. Any unsold items left at the auction will be disposed of at the expense of the seller
7. No boat anchors

VOMARC Hamfest

Hi, I am Jim Hill, K6UUW, and I would like to invite you and your club members to the Valley of the Moon Amateur Radio Club (VOMARC) hamfest on April 24th in beautiful Sonoma.

Activities include a swap meet, VE session, breakfast, fox hunt, and a lot of friendly folks. See <http://www.vomarc.org/Hamfest.html>

FCC Invites Comments

NEWINGTON, CT, Mar 24, 2004—The FCC is seeking comment on three plans—including ARRL's call for a new beginner's license and code-free HF access—that would reshape the Amateur Service licensing structure. Each Petition for Rule Making responds to actions taken at World Radiocommunication Conference 2003 (WRC-03) last summer that made changes to Article 25 of the international Radio Regulations. While differing substantially in some other aspects, the three restructuring petitions call for modifications at Amateur Radio's entry level and for a three-tiered license system. One petition goes beyond licensing structure to recommend additional changes to amateur testing and HF digital privileges. A fourth petition put on public notice today focuses solely on the Morse requirement. Designated as RM-10867 through RM-10870, all four petitions are available via the FCC's Electronic Comment Filing System. Comments are due by April 24.



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CALENDAR OF EVENTS

April 5	7:30 pm	MDARC Board Meeting	Baker's Square Willow Pass, Concord
April 16	7:00 pm	MDARC Auction	Our Savior's Lutheran Church
April 30		May <i>Carrier</i> Deadline	
May 3	7:30 pm	MDARC Board Meeting	Baker's Square Willow Pass, Concord

The Carrier
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Change in Service Requested

MDARC Meeting: April 16